

Amendments In the Claims

Applicants respectfully request to cancel and add claims as indicated below:

1. – 115. Cancelled.

116. (New) A method comprising:

selecting a set of instances from a set of data;

determining a number of related records in a set of related records of a table, wherein

each record of the set of related records is related to one instance of the set of

instances; and

comparing the number of related records and a number of instances in the set of instances

prior to generating a set of select statements to select the set of related records

from the table.

117. (New) The method of claim 116 wherein

if the comparing indicates that the number of instances is much larger,

generating the set of select statements to include one select statement to select the

set of related records from the table, wherein

the one select statement includes a clause to select a corresponding record

for each instance of a set comprising a maximum number of

instances of the set of instances, and

the maximum number of instances is determined by a maximum number

of clauses in the one select statement.

118. (New) The method of claim 117 wherein

the number of instances is much larger when a ratio between the number of instances and

the number of related records is larger than a specified value.

119. (New) The method of claim 118 wherein

the specified value is 7.

120. (New) The method of claim 117 further comprising:
executing the one select statement;
after executing the one select statement, determining a set of respective operations to perform on the table, wherein
each respective operation of the set of respective operations affects a respective record in the table, and
each respective record corresponds to one instance of the set comprising the maximum number of instances; and
generating a set of SQL statements to perform each respective operation of the set of respective operations, wherein
the set of SQL statements does not join the table to another table.

121. (New) The method of claim 120 wherein
each respective operation is one of
an update operation to update an existing record in the table and
an insert operation to insert a new record in the table.

122. (New) The method of claim 121 further comprising:
executing the set of SQL statements to provide the respective record in the table for each instance of the set comprising the maximum number of instances.

123. (New) The method of claim 121 wherein
the generating the one select statement comprises
constructing a select clause to select a record from a plurality of records in the table, wherein
the record has identifying data for one instance of the set comprising the maximum number of instances; and
concatenating to the select clause a respective OR clause to select a subsequent record for each subsequent instance of the set comprising the maximum number of instances excluding the one instance.

124. (New) The method of claim 121 wherein
the determining the respective operation for a first instance of the set comprising the
maximum number of instances comprises:
comparing respective data in each respective record of a plurality of records in the
table to identifying data for the first instance; and
if the identifying data for the first instance matches the respective data of a
first record of the plurality of records,
determining that the respective operation for the first instance is the
update operation;
and
if the identifying data for the first instance does not match the respective
data of any record of the plurality of records,
determining that the respective operation for the first instance is the
insert operation.

125. (New) The method of claim 124 wherein
the generating the set of SQL statements further comprises
if the respective operation is the update operation,
adding an update statement to the set of SQL statements to update the first
record using instance data from the first instance.

126. (New) The method of claim 124 wherein
the generating the set of SQL statements further comprises
if the respective operation is the insert operation,
adding an insert statement to the set of SQL statements to insert a second
record into the table using instance data from the first instance.

127. (New) The method of claim 116 wherein
if the comparing indicates that the number of instances is not much larger,
generating the set of select statements to include one select statement for each
instance of the set of instances;
executing each statement of the set of select statements prior to generating a
subsequent select statement of the set of select statements.

128. (New) The method of claim 116 wherein the determining the number of related records is performed without selecting the set of related records from the table.

129. (New) A system comprising:
selecting means for selecting a set of instances from a set of data;
determining means for determining a number of related records in a set of related records of a table, wherein
each record of the set of related records is related to one instance of the set of instances; and
comparing means for comparing the number of related records and a number of instances in the set of instances prior to generating a set of select statements to select the set of related records from the table.

130. (New) The system of claim 129 further comprising:
generating means for generating the set of select statements to include one select statement to select the set of related records from the table if the comparing indicates that the number of instances is much larger, wherein
the one select statement includes a clause to select a corresponding record for each instance of a set comprising a maximum number of instances of the set of instances, and
the maximum number of instances is determined by a maximum number of clauses in the one select statement.

131. (New) The system of claim 130 further comprising:
executing means for executing the one select statement;
second determining means for determining a set of respective operations to perform on the table after executing the one select statement, wherein
each respective operation of the set of respective operations affects a respective record in the table, and
each respective record corresponds to one instance of the set comprising the maximum number of instances; and
second generating means for generating a set of SQL statements to perform each respective operation of the set of respective operations, wherein
the set of SQL statements does not join the table to another table.

132. (New) The system of claim 131 wherein each respective operation is one of
an update operation to update an existing record in the table and
an insert operation to insert a new record in the table.

133. (New) A computer-readable medium comprising:
selecting instructions configured to select a set of instances from a set of data;
determining instructions configured to determine a number of related records in a set of
related records of a table, wherein
each record of the set of related records is related to one instance of the set of
instances; and
comparing instructions configured to compare the number of related records and a
number of instances in the set of instances prior to generating a set of select
statements to select the set of related records from the table.

134. (New) The computer-readable medium of claim 133 further comprising:
generating instructions configured to generate the set of select statements to include one
select statement to select the set of related records from the table if the comparing
indicates that the number of instances is much larger, wherein
the one select statement includes a clause to select a corresponding record for each
instance of a set comprising a maximum number of instances of the set of
instances, and
the maximum number of instances is determined by a maximum number of
clauses in the one select statement.

135. (New) The computer-readable medium of claim 134 further comprising:
executing instructions configured to execute the one select statement;
second determining instructions configured to determine a set of respective operations to
perform on the table after executing the one select statement, wherein
each respective operation of the set of respective operations affects a respective
record in the table, and
each respective record corresponds to one instance of the set comprising the
maximum number of instances; and
second generating instructions configured to generate a set of SQL statements to perform
each respective operation of the set of respective operations, wherein
the set of SQL statements does not join the table to another table.

136. (New) The computer-readable medium of claim 135 wherein each respective operation is one of
an update operation to update an existing record in the table and
an insert operation to insert a new record in the table.

137. (New) A computer system comprising:
a processor to execute instructions; and
a memory to store the instructions, wherein
the memory is coupled to the processor, and
the instructions comprise:
selecting instructions configured to select a set of instances from a set of
data;
determining instructions configured to determine a number of related
records in a set of related records of a table, wherein
each record of the set of related records is related to one instance of
the set of instances; and
comparing instructions configured to compare the number of related
records and a number of instances in the set of instances prior to
generating a set of select statements to select the set of related
records from the table.

138. (New) The computer system of claim 137 wherein the instructions further
comprise:
generating instructions configured to generate the set of select statements to include one
select statement to select the set of related records from the table if the comparing
indicates that the number of instances is much larger, wherein
the one select statement includes a clause to select a corresponding record for each
instance of a set comprising a maximum number of instances of the set of
instances, and
the maximum number of instances is determined by a maximum number of
clauses in the one select statement.

139. (New) The computer system of claim 138 wherein the instructions further comprise:

executing instructions configured to execute the one select statement;
second determining instructions configured to determine a set of respective operations to perform on the table after executing the one select statement, wherein
each respective operation of the set of respective operations affects a respective record in the table, and
each respective record corresponds to one instance of the set comprising the maximum number of instances; and
second generating instructions configured to generate a set of SQL statements to perform each respective operation of the set of respective operations, wherein the set of SQL statements does not join the table to another table.

140. (New) The computer system of claim 139 wherein
each respective operation is one of
an update operation to update an existing record in the table and
an insert operation to insert a new record in the table.

141. (New) A system comprising:
a selecting module configured to select a set of instances from a set of data;
a determining module configured to determine a number of related records in a set of related records of a table, wherein
each record of the set of related records is related to one instance of the set of instances; and
a comparing module configured to compare the number of related records and a number of instances in the set of instances prior to generating a set of select statements to select the set of related records from the table.

142. (New) The system of claim 141 further comprising:
a generating module configured to generate the set of select statements to include one
select statement to select the set of related records from the table if the comparing
indicates that the number of instances is much larger, wherein
the one select statement includes a clause to select a corresponding record for each
instance of a set comprising a maximum number of instances of the set of
instances, and
the maximum number of instances is determined by a maximum number of
clauses in the one select statement.

143. (New) The system of claim 142 further comprising:
an executing module configured to execute the one select statement;
a second determining module configured to determine a set of respective operations to
perform on the table after executing the one select statement, wherein
each respective operation of the set of respective operations affects a respective
record in the table, and
each respective record corresponds to one instance of the set comprising the
maximum number of instances; and
a second generating module configured to generate a set of SQL statements to perform
each respective operation of the set of respective operations, wherein
the set of SQL statements does not join the table to another table.

144. (New) The system of claim 143 wherein
each respective operation is one of
an update operation to update an existing record in the table and
an insert operation to insert a new record in the table.